



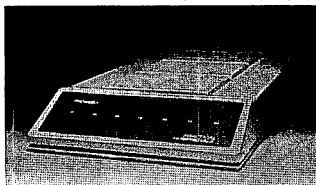
PRODUCT INFORMATION GUIDE

VOLUME 3



PRACTICAL MODEM 2400SA™

2400 BAUD STAND-ALONE INTELLIGENT MODEM



The Practical Modem 2400SA delivers all the very practical advantages of high speed data transmission via telephone lines. Further, it allows you to make the most of lower phone rates when they're in effect. Put simply, when the rates are low the PM2400SA lets you transmit/receive more data more cost effectively.

The Practical Modem 2400SA is guaranteed to be 100% Hayes™ compatible. In fact, the PM2400SA is so compatible that even Hayes' own Smartcom™ can't tell the difference. And, like every Practical Peripherals product, the PM2400SA is engineered to deliver unparalleled performance and reliability...all at a remarkably low price.

Interface: RJ11/RJ41S/RJ45S or RJ12/RJ13 telephone jack

Compliance: Compatible with CCITT Recommendation V.22 1200 bps asynchronous modems. Compatible with CCITT Recommendation V.22 bis 1200 and 2400 bps asynchronous modems. Compatible with Bell 103 0-300 bps asynchronous modems. Compatible with Bell 212A 1200 bps asynchronous modems. FCC Part 15, FCC Part 68 for direct connection to public telephone lines.

Dimensions: 10.5" x 5.5" x 1.3"

Each package contains: Practical Modem 2400SA Modem Unit, Power Pack and User's Manual.

MODEL NO.

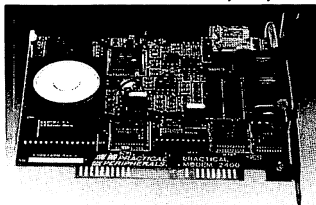
PM2400SA

INTERFACE

RS-232C

PRACTICAL MODEM 2400™

ADVANCED SURFACE MOUNT TECHNOLOGY BRINGS YOU FULL CARD
FEATURES ON AN IBM™ PC™ XT™ AT™ AND COMPATIBLES HALF CARD!



The PM2400 is a 0-300, 1200 and 2400 Baud Internal Half Card Modem. It's 100% Hayes compatible...so compatible, that even Hayes' own Smartcom can't tell the difference. And, with high speed data transmission (2400 Baud) you'll make the most of lower phone rates during the hours when they're in effect.

In fact, the 2400 Baud saves you money even when lower rates aren't in effect. Just as important, the PM2400 modem features automatic adaptive equalization for consistent, error-free transmission over all common phone lines.

The PM2400 includes the best selling ProComm communications package, too. And, remember, the PM2400 is backed by Practical Peripherals' phenomenal 5 year performance guarantee! Performance, features, and exceptional reliability make the PM2400 a real value!

Interface: RJ11/RJ41S/RJ45S or RJ12/RJ13 telephone jack

Compliance: Compatible with CCITT Recommendation V.22 1200 bps asynchronous modems. Compatible with CCITT Recommendation V.22 bis 1200 and 2400 bps asynchronous modems. Compatible with Bell 103 0-300 bps asynchronous modems. Compatible with Bell 212A 1200 bps asynchronous modems. FCC Part 15, FCC Part 68 for direct connection to public telephone lines.

Each package contains: Practical Modem 2400, User's Manual and ProComm Communications Package (Ver. 2.4.2).

MODEL NO.

PM2400

INTERFACE

IBM PC Slot
Half or Full



MACINTOSH™ COMMUNICATIONS PACKAGE™

2400 BAUD STAND-ALONE MODEM, CABLE AND COMMUNICATIONS PROGRAM



This modem's just for the Macintosh™. Even the color is Mac-compatible. A complete value featuring our Practical stand-alone 2400 modem. Feature for feature it's way out in front of anything comparable. Hayes compatibility is 100%, even Hayes' own Smartcom™ can't tell the difference.

The Macintosh™ Communications Package is complete with the cable and the MicroPhone™ communications program that goes far beyond any program available for the Macintosh™. Improved performance, a rock solid guarantee and superior value, all we can say is it's "mac-nificent!"

Interface: RJ11/RJ41S/RJ45S or RJ12/RJ13 telephone jack

Compliance: Compatible with CCITT Recommendation V.22 1200 bps asynchronous modems. Compatible with CCITT Recommendation V.22 bis 1200 and 2400 bps asynchronous modems. Compatible with Bell 103 and 0-300 bps asynchronous modems. Compatible with Bell 212A 1200 bps asynchronous modems. FCC Part 15, FCC Part 68 for direct connection to public telephone lines.

Dimensions: 10.5" x 5.5" x 1.3"

Power: 12 VAC, 850 ma plug-in wall Power-Pack

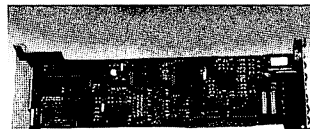
Each Package contains: PM1200SA Modem unit, MicroPhone™ Communications Program, Cable (DB25 to D9; D9 to Mini DIN), User's Manual and Power Pack.

MODEL NO.

Macintosh™ Communications Package™

PRACTICAL MODEM 2400 PS/2™

2400 BAUD FULL CARD MODEM FOR IBM™ AND COMPATIBLES



Our advanced surface mount technology is setting new standards of engineering and performance excellence...and value. Our new PS/2 modem proves the point. The Practical Modem 2400 PS/2 has all the features and operating efficiency you could ask for. And we mean feature for feature.

Not only is the PM2400 PS/2 100% Hayes™ compatible, we think it's the most user compatible modem around. It's all here. Price, performance, American engineering and quality guaranteed for a full five years...it all adds up to an unquestionably superior value.

Interface: RJ11/RJ41S/RJ45S or RJ12/RJ13 telephone jack

Compliance: Compatible with CCITT Recommendation V.22 1200 bps asynchronous modems. Compatible with CCITT Recommendation V.22 bis 1200 and 2400 bps asynchronous modems. Compatible with Bell 103 and 0-300 bps asynchronous modems. Compatible with Bell 212A 1200 bps asynchronous modems. FCC Part 15, FCC Part 68 for direct connection to public telephone lines.

Each Package contains: Practical Modem 2400 PS/2 unit, User's Manual and ProComm Communications Package (Ver. 2.4.2).

MODEL NO.

PM2400 PS/2

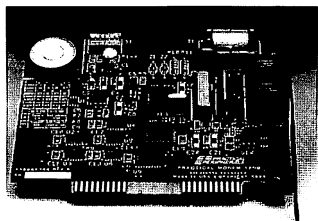
INTERFACE

IBM™ PS/2 Full Slot using MicroChannel™ Architecture



PRACTICAL MODEM 1200™

THE COMPLETE HALF CARD MODEM FOR THE IBM, PC, XT, AT AND COMPATIBLES



The PM1200 is a 1200/300 Baud internal half card modem that's 100% Hayes compatible. The PM1200 includes ProComm (Ver. 2.4.2)...all of which makes it a remarkably complete data communications package. The PM1200 is a genuine value.

MODEL NO.

PM1200

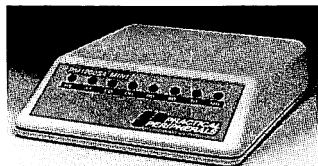
INTERFACE

IBM PC Slot
Half or Full



PRACTICAL MODEM 1200SA MINI™

FULLY FEATURED STAND-ALONE 1200 BAUD MODEM IN A CONVENIENT, COMPACT SIZE



The PM1200SA Mini is the 100% Hayes™ compatible modem that's ideal for any work environment. Utilizing state-of-the-art surface mount technology, the PM1200SA Mini delivers full size modem capabilities and ultra-reliability in a compact size. And does it all at a budget-compatible price.

An advanced design approach to miniaturization delivers consistent error-free transmission over common phone lines. The PM1200SA Mini is compatible with all popular communications programs. It's the pocket-size modem that offers big performance, full size features, tremendous value and an uncompromised guarantee.

Interface: RJ11C telephone jack

Compliance: Bell 212A and 103 Standards FCC Part 68 for direct connection to public phone lines, FCC Part 15B.

Dimensions: 5" x 4" x 1.1"

Each package contains: Practical Modem 1200SA Mini, AC Power Supply and User's Manual.

MODEM COMPARISON CHART

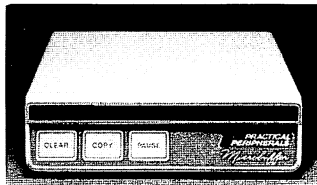
	MODEL NO.						INTERFACE	
	PM1200SA Mini						RS-232C	
	PM1200	PM1200SA** Mini	PM2400	PM2400SA**	PM2400SA**	PM2400SA**	MACINTOSH	PS/2
Baud Rate	1200	1200	2400	2400	2400	2400	2400	2400
100% Hayes Compatible	YES	YES	YES	YES	YES	YES	YES	YES
Interface Type	STD. PC BUS	RS232C	STD. PC BUS	RS232C	MAC SERIAL PORT	MICROCHANNEL	PROCOMM (2.4.2)	PROCOMM (2.4.2)
Software Included	PROCOMM (2.4.2)	NO	PROCOMM (2.4.2)	NO	MICROPHONE (1.1)	PROCOMM (2.4.2)	PROCOMM (2.4.2)	PROCOMM (2.4.2)
Extras	COMPUSERVE/OAG	COMPUSERVE/OAG	COMPUSERVE/OAG	COMPUSERVE/OAG	COMPUSERVE/OAG	COMPUSERVE/OAG	COMPUSERVE/OAG	COMPUSERVE/OAG
Cables	N/A	NO	N/A	NO	2 cables	N/A	N/A	N/A
Phone Cable	6'	6'	6'	6'	6'	6'	6'	6'
Power Supply	N/A	YES	N/A	YES	YES	N/A	N/A	N/A
Auto Answer/Auto Dial	YES	YES	YES	YES	YES	YES	YES	YES
Memory Phone Numbers	0	0	4	4	4	4	4	4
Switches	DIPSW	DIPSW	EEPROM	EEPROM	EEPROM	EEPROM	EEPROM	EEPROM
Volume Control	Software	Software	Software	Software	Software	Software	Software	Software
Full/Half Duplex	YES	YES	YES	YES	YES	YES	YES	YES
Number of Jacks	2	1	2	2	2	2	2	2
Adaptive Equalization	NO	NO	YES	YES	YES	YES	YES	YES
Status Indicators	N/A	8	N/A	7	7	7	N/A	N/A
Synchronous	NO	NO	NO	NO	NO	NO	NO	NO
Asynchronous	YES	YES	YES	YES	YES	YES	YES	YES
Com Ports	1,2,3,4	N/A	1,2 or 3,4*	N/A	N/A	1,2,3,4,5,6,7,8	N/A	N/A
Chip Set Used	Sierra	Sierra	Rockwell	Rockwell	Rockwell	Rockwell	Rockwell	Rockwell
FCC, D.O.C. (Canada)	YES	YES	YES	YES	YES	YES	YES	YES
Manufacturer Technique	S.M.T.	S.M.T.	S.M.T.	S.M.T.	S.M.T.	S.M.T.	S.M.T.	S.M.T.
Warranty	5 years	5 years	5 years	5 years	5 years	5 years	5 years	5 years
Manufactured	U.S.A.	U.S.A.	U.S.A.	U.S.A.	U.S.A.	U.S.A.	U.S.A.	U.S.A.

* Call Tech Support for free Decoder Chip for COM 3.4

** C.S.A. approved in Canada

MICROBUFFER[®] IN-LINE[™]

STAND-ALONE PRINTER BUFFER FOR MOST PRINTER/COMPUTER COMBINATIONS



The world's best selling printer buffer is now better with 1 MB of serial buffer muscle! Our 1 MB Serial Microbuffer In-line is made available by expanding our Serial unit from 512K to 1 MB using 2-MEM 256K modules. Microbuffer In-line is also available in Parallel 32K to 256K versions. Both Serial and Parallel versions are easily user expandable thanks to Practical's unique design.

The 1 MB model is ideal for data intensive output like plotters, dot graphics, large spreadsheets, CAD systems, and expanded Lotus[™] applications. And, the 1 MB Microbuffer features a 38.4K Baud that makes it twice as fast as any other buffer.

Touch-sensitive front panel controls allow users to conveniently clear buffer memory, interrupt operation...even make multiple copies. Includes: 4' cable on Parallel unit, Power Adapter.

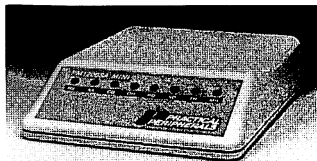
MODEL NO.	INTERFACE	MEMORY
MBIS 32K	Serial	32K
MBIS 64K	Serial	64K
MBIS 128K	Serial	128K
MBIS 256K	Serial	256K
MBIS 512K*	Serial	512K

* 1MB version available by using (2) MEM 256K snap in modules.

MODEL NO.	INTERFACE	MEMORY
MEM 256K	MBIS	256K
MBIP 32K	Parallel	32K
MBIP 64K	Parallel	64K
MBIP 128K	Parallel	128K
MBIP 256K	Parallel	256K

MICROBUFFER[®] MINI[™]

COMPACT STAND-ALONE PRINTER BUFFER

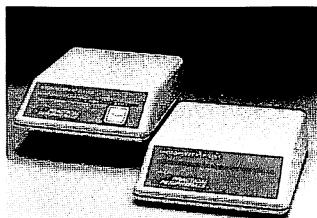


Available with 32K up to 512K of buffering memory - more than enough for 300 double-spaced pages. Yet it's compact enough to fit in the palm of your hand. When a lengthy file is involved, the Microbuffer Mini can actually add hours to the amount of time the computer is available for data processing. Extremely easy to install, the Microbuffer Mini is available in three different models: Serial to Parallel (512K), Parallel to Serial (512K) and Parallel to Parallel (512K).

MODEL NO.	DESCRIPTION
MBM P/P 512K	Parallel to Parallel
MBM S/P 512K	Serial to Parallel
MBM P/S 512K	Parallel to Serial

MICROBUFFER[®] P/LINK[™]

THE PRINTER BUFFER PACKAGE THAT LETS USERS PUT THEIR PRINTER WHERE IT'LL DO THE MOST GOOD



The Microbuffer P/Link[™] lets users put the their PC's printer where it will do the most good for the most people in any work environment. Anywhere up to 7000 ft. away. The Practical Microbuffer P/Link connects to the PC's parallel port. And it transmits the data over ordinary telephone extension cable.

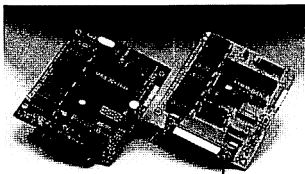
The Microbuffer P/Link has been designed to let users choose the amount of buffered memory in six user upgradeable sizes from 32 - 512K. Each model is Centronics[™]/Epson[™] compatible. And, despite its compact size and a price that makes it a tremendous value, the Microbuffer P/Link[™] is engineered for years of reliable use.

Each package contains: Microbuffer P/Link Transmitter, Microbuffer P/Link Receiver, 2 AC Power Supplies, 75 feet of RJ11 telephone cable, and User Installation/Operational Manual.

MODEL NO.	MEMORY
Microbuffer P/Link	32K (one 256K DRAM Installed)

MICROBUFFER/E™

INTERNAL PRINTER BUFFER FOR EPSON™/IBM™ PC PRINTERS



Mounts directly inside Epson MX, RX, FX and LQ series printers as a buffered interface so users can print and process simultaneously with any computer. (Also works with the IBM PC printer and other Epson-made printers.) Available in Parallel and Serial models with many buffering capacities. The 64K Parallel model can be expanded with the PPI RAM Upgrade Kit as can the Serial 8K, 16K and 32K models. Additional upgrades are available with the MBS Memory Expansion. The MBS does not disable the parallel port.

MODEL NO.	INTERFACE	MEMORY
MBP 16K	Parallel	16K
MBP 32K	Parallel	32K
MBP 64K	Parallel	64K
MBS 8K	Serial	8K
MBS 16K	Serial	16K
MBS 32K	Serial	32K

OPTION: MBS MEMORY EXPANSION MODULE

A snap-in memory expander that adds 32K of buffering capacity to the Serial Microbuffer/E. The 8K and 16K models must first be upgraded to 32K with PPI RAM Upgrade Kits before installing the Memory Expansion Module.

MODEL NO.

MEM 32K

BUFFER COMPARISON CHART

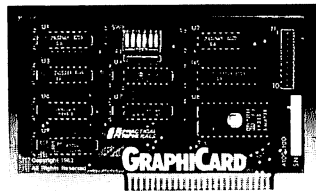
	MBIP	MBS	Microbuffer P/Link (Note 1)	Mini P/P (Note 1)	Mini P/S (Note 1)	Mini S/P (Note 1)	EPSON MBS	EPSON MBP
User Upgradable	YES	YES	YES	YES	YES	YES	YES	YES
Maximum Memory	256K	1 MEG	512K	512K	512K	512K	64K	64K
How to Upgrade (Chip Type)	256K*	256K*	256K* or Std. 1 MEG	256K* or Std. 1 MEG	MICRON 256K or Std. 1 MEG	MICRON 256K or Std. 1 MEG	64K	64K
Sockets on Motherboard	8	16	4	4	4	4	4	8
Daughter Board to Upgrade	NO	2 @ 256K ea.	NO	NO	NO	NO	1 @ 32K	NO
Switches to Set	NO	YES	NO	NO	YES	YES	YES	NO
Pause Button	YES	YES	NO	NO	NO	NO	N/A	N/A
Copy Button	YES	YES	NO	NO	NO	NO	N/A	N/A
Clear Button	YES	YES	YES	NO	NO	NO	N/A	N/A
Pass Button	NO	YES	NO	NO	NO	NO	N/A	N/A
LED Indicators	YES	YES	YES	NO	NO	NO	N/A	N/A
Cable Included	YES	NO	YES, 75'	YES	YES	YES	NO	NO
Interface Type	Centronics	RS232C	Centronics	Centronics	Centronics	RS232C	RS232C	Centronics
Power Supply	YES**	YES**	YES (2)**	YES**	YES**	YES**	N/A	N/A
Made in U.S.A.	YES	YES	YES	YES	YES	YES	YES	YES
5 Year Warranty	YES	YES	YES	YES	YES	YES	YES	YES

Note 1: Maximum memory using 256K type chips is 128K
Maximum memory using 1 MEG type chips is 512K (16 pin chips)

* Denotes any speed, standard 16 pin 256K DRAM chips
**C.S.A. approved in Canada

GRAPHICARD™

PARALLEL GRAPHICS INTERFACE CARD FOR APPLE™ II™ II +™ IIe™ COMPUTERS

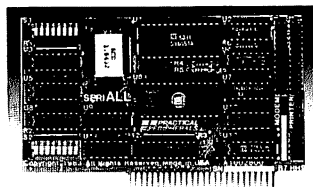


An unbeatable price/performance value in graphics interface cards for Apple II series computers. Switch-selectable for 37 of the most popular parallel printer models. Hardware/software compatible with the Apple Parallel card. Includes: 6' cable.

MODEL NO.	INTERFACE
GRAPHICARD	Parallel

SERIAL™

SERIAL PRINTER/MODEM INTERFACE FOR APPLE II, II +, IIe COMPUTERS



The Do-It-All Serial interface card for Apple II series computers. Provides text and graphics printer interfacing capabilities and a communications mode for modem and "dumb terminal" operation. Fully compatible with the Apple Serial card. Includes: Serial transition cable.

MODEL NO.	INTERFACE
SERIAL	Serial



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